

IN THE CLAIMS:

This listing of the claims replaces all prior versions and listings of the claims in this application.

The text of all pending claims (including any withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

Please AMEND claims 1-16 in accordance with the following:

1. (Currently amended) A data storage medium comprising:
main data including audio data and/or video data;
sub data recorded in a separate bitstream from the main data to be reproduced in
synchronization with the main data by a reproducing apparatus; and
navigation information defining a relation required for the main data and the sub data to
be output in synchronization with each other by the reproducing apparatus;
wherein:
the navigation information comprises:
an identifier to identify a particular bitstream of the main ~~data~~, data; and
playback time information for the sub data corresponding to the main data;
and
the main data, the sub data, and the navigation information are asynchronously
recorded.

2. (Currently amended) The data storage medium of claim 1, further comprising extra
data recorded in a separate bitstream from the main data and the sub data to be reproduced in
connection with the main data by the reproducing ~~apparatus~~, apparatus;
wherein:
the navigation information further defines a relation required for the main data
and the extra data to be output in synchronization with each other by the reproducing apparatus,

and further comprises playback time information for the extra data corresponding to the main data, and data;

~~wherein~~ the main data, the sub data and the extra data are recorded simultaneously by alternation or in a predetermined sequential order in different areas on the data storage medium; and

the main data, the sub data, the extra data, and the navigation information are asynchronously recorded.

3. (Currently amended) The data storage medium of claim 2, wherein the main data are is received and encoded by an internal encoder or ~~are~~ input through a digital interface, and recorded on the data storage medium.

4. (Currently amended) The data storage medium of claim 2, wherein the sub data and/or the extra data are received and encoded by an internal encoder or ~~are~~ input through the digital interface, and recorded on the data storage medium.

5. (Currently amended) A recording method comprising:

~~(a)~~ recording main data including audio data and/or video data;

~~(b)~~ recording sub data to be reproduced in synchronization with the main data in a separate bitstream from the main data; and

~~(c)~~ recording navigation information defining a relation required for the main data and the sub data to be reproduced in synchronization with each other;

wherein:

the navigation information comprises:

an identifier to identify a particular bitstream of the main data, data; and

playback time information for the sub data corresponding to the main data;

and

the main data, the sub data, and the navigation information are asynchronously recorded.

6. (Currently amended) The recording method of claim 5, further comprising:

~~(d)~~-recording extra data to be reproduced in connection with the main data in a separate bitstream from the main data and the sub data;

~~(e)~~-recording navigation information defining a relation required for the main data and the extra data to be output in connection with each other, other;

wherein;

the navigation information further comprises playback time information for the extra data corresponding to the main ~~data~~, and data;

~~wherein~~ the main data, the sub data and the extra data are recorded simultaneously by alternation or in a predetermined sequential order in different areas on the data storage medium; and

the main data, the sub data, the extra data, and the navigation information are asynchronously recorded.

7. (Currently amended) The recording method of claim 5, wherein ~~step (a)~~ the recording of the main data comprises:

- ~~(a1)~~-receiving the main data through a digital interface; and
- ~~(a2)~~-recording the received main data.

8. (Currently amended) The recording method of claim 5, wherein ~~step (a)~~ the recording of the main data comprises:

- ~~(a1)~~-receiving the main data as analog ~~signal~~, signal;
- ~~(a2)~~-encoding the received main data; and
- ~~(a3)~~-recording the encoded main data.

9. (Currently amended) The recording method of claim 5, wherein ~~step (b)~~ the recording of the sub data comprises:

- ~~(b1)~~-receiving the sub data through the digital interface; and
- ~~(b2)~~-recording the received sub data.

10. (Currently amended) The recording method of claim 5, wherein ~~step (b)~~ the recording of the sub data comprises:

- (b1)-receiving the sub data as analog-signal, signal;
- (b2)-encoding the received sub data; and
- (b3)-recording the encoded sub data.

11. (Currently amended) The recording method of claim 6, wherein ~~step (e)~~ the recording of the navigation information comprises:

- (e1)-receiving the extra data through the digital interface; and
- (e2)-recording the received extra data.

12. (Currently amended) The recording method of claim 6, wherein ~~step (e)~~ the recording of the navigation information comprises:

- (e1)-receiving the extra data as analog-signal, signal;
- (e2)-encoding the received extra data; and
- (e3)-recording the encoded extra data.

13. (Currently amended) A reproducing method comprising:

(a)-reading main data including audio data and/or video data recorded in a discrete bitstream on a data storage medium;

(b)-reading sub data recorded in a separate bitstream from the main data, on the data storage medium, which is reproduced in synchronization with the main data; and

(c)-reproducing the read main data and the read sub data based on navigation information defining a relation required for the read main data and the read sub data to be reproduced in synchronization with each other;

wherein:

the navigation information comprises:

an identifier to identify a particular bitstream of the main data, data; and

playback time information for the read sub data corresponding to the read

main data; and

the main data, the sub data, and the navigation information are asynchronously recorded.

14. (Currently amended) The reproducing method of claim 13, further comprising ~~(d1)~~ outputting the reproduced main data and sub data through a digital interface.

15. (Currently amended) The reproducing method of claim 13, further comprising ~~(d2)~~ decoding the reproduced main data and sub data.

16. (Currently amended) The reproducing method of claim 13, wherein step ~~(e)~~ the reproducing of the read main data and the read sub data comprises:

~~(e1)~~ reading the navigation information defining a relation required for the read main data and sub data to be reproduced in synchronization with each other; and

~~(e2)~~ reproducing the read main data and the read sub data based on the navigation information.

17.-47. (Canceled)

48. (Previously presented) The data storage medium of claim 1, wherein the data storage medium is an apparatus-readable medium that is readable by the reproducing apparatus.